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Introduction

Since entering the linguistic stage in the late sixties, Davidsonian event arguments have taken on an important role in linguistic theorizing. The central claim of Donald Davidson's seminal (1967) work "The logical form of action sentences" is that events are spatio-temporal *things*, i.e., concrete particulars with a location in space and time. This enrichment of the underlying ontology has proven to be of great benefit in explaining numerous combinatorial and inferential properties of natural language expressions. Among the many remarkable advances achieved within the Davidsonian paradigm since then figure most prominently the progress made in the theoretical description of verb semantics, including tense and aspect, and the break through in analyzing adverbial modification. Numerous monographs and collections attest to the extraordinary fertility of the Davidsonian program; see, e.g., Rothstein (1998), Tenny & Pustejovsky (2000), Higginbotham, Pianesi & Varzi (2000), Lang, Maienborn & Fabricius-Hansen (2003), Austin, Engelberg & Rauh (2004) to mention just a few more recent collections.

In the course of the evolution of the Davidsonian paradigm, two moves have turned out to be particularly influential in terms of expanding and giving new direction to this overall approach. These are, first, the "Neo-Davidsonian turn" introduced by Higginbotham (1985, 2000) and Parsons (1990, 2000), and, secondly, Kratzer's (1995) merger of event semantics with the stage-level/individual-level distinction.

The neo-Davidsonian approach has lately developed into kind of a standard for event semantics. It is basically characterized by two largely independent assumptions. The first assumption concerns the arity of verbal predicates. While Davidson introduced event arguments as an *additional* argument of (some) verbs, neo-Davidsonian accounts take the event argument of a verbal predicate to be its *only* argument. The relation between events and their participants is accounted for by the use of thematic roles. The second neo-Davidsonian assumption concerns the distribution of event arguments. They are considered to be much more widespread than originally envisaged by Davidson. Hence, neo-Davidsonian approaches typically assume that it is not only (action) verbs that introduce Davidsonian event arguments, but also adjectives, nouns, and prepositions. Thus, nowadays event arguments are widely seen as a trademark for predicates in general.[1]

The second milestone in the development of the Davidsonian program is Kratzer's (1995) event semantic treatment of the so-called stage-level/individual-level distinction, which goes back to Carlson (1977) and, as a precursor, Milsark (1974, 1977). Stage-level predicates (SLPs) express – roughly speaking – temporary or accidental properties, whereas

[1] A note on terminology: Bach (1986) coined the term "eventuality" for the broader notion of events, which includes, besides events proper, i.e., accomplishments and achievements in Vendler's (1967) terms, also processes and states. Other labels for event arguments in the broad sense are, e.g., "spatiotemporal location" (Kratzer 1995), "Davidsonian argument" (Chierchia 1995), or "E-position" (Higginbotham 1985).

individual-level predicates (ILPs) express (more or less) permanent or inherent properties.[2] On Kratzer's (1995) account, the SLP/ILP-distinction basically boils down to the presence or absence of an extra event argument. Stage-level predicates are taken to have an additional event argument, while individual-level predicates lack such an extra argument. This difference in argument structure is then exploited syntactically by the assumption of different subject positions for SLPs and ILPs; see Diesing (1992). Since then interest has been directed towards the role of event arguments at the syntax/semantics interface and the impact they have on syntax proper in terms of, e.g., event phrases.

All in all, Davidsonian event arguments have become a very familiar "all-purpose" linguistic instrument over the past decades, and recent years have seen a continual extension of possible applications far beyond the initial focus on verb semantics and adverbials.

These developments are accompanied by a newly found interest in the linguistic and ontological foundation of events. To the extent that more attention is paid to less typical events than the classical 'Jones buttering a toast' or 'Brutus stabbing Caesar', which always come to the Davidsonian semanticist's mind first, there is a growing awareness of the vagueness and incongruities lurking behind the notion of events and its use in linguistic theorizing. A particularly controversial case in point is the status of *states*. The question of whether state expressions can be given a Davidsonian treatment analogous to process and event expressions (in the narrow sense) is still open for debate; see Maienborn (2005) and the commentaries to this target article for some of the pros and cons.

The present volume grew out of a workshop "Event arguments in syntax, semantics and discourse" that the editors organized in February 26-28, 2003, in Munich (as part of the annual meeting of the German association for linguistics, DGfS), and in which we invited contributions geared towards drawing an interim balance of the use of and motivation for event arguments in linguistic theory. The articles presented here offer proposals towards this end from different empirical and theoretical perspectives. The leading question shared by the majority of the articles could be phrased in the following way.

How do lexical semantics, syntax, and pragmatics conspire to project event structure?

Discussing a wide range of linguistic phenomena (mostly pertaining to English, German and Romance) the articles

(a) supply fresh evidence for the virtually ubiquitous presence of event arguments in linguistic structure;

(b) they provide new, event-based, solutions as superior alternatives to already existing analyses; and/or

(c) they shed new light on the nature of event arguments and the way these are handled by the linguistic machinery.

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[2] See, e.g., Higginbotham & Ramchand (1997), Jäger (2001) for overviews of the linguistic phenomena that have been associated with the stage-level/individual-level distinction.

The volume is organized into four sections: Events – states – causation; Event nominals; Events in composition; Measuring events.

Section I: ***Events – states – causation*** addresses mainly foundational issues concerning the nature of events and states, how they relate to causation, and how they show up in the linguistic structure.

Manfred Bierwisch discusses the anchoring and accessibility of event arguments in semantic structure. He compares the different ways in which event arguments are structurally anchored in Davidsonian, neo-Davidsonian, and Reichenbachian approaches and presents arguments in favor of the latter variant. Bierwisch then goes on to argue that, no matter how complex a verb's internal event structure might be, only the highest event argument is made accessible for reference, quantification, modification, etc. This means, in particular, that inchoative and causative verbs will never project a target state into their argument structure. Apparent counterevidence as provided by durational adverbials, which obviously serve to specify the duration of an inchoative's target state, is accounted for by assuming that the operator BECOME is of an elusive nature. That is, target state modification of inchoatives relies on the improper absence of BECOME.

Stefan Engelberg draws attention to one of the classes of verbs that do not fit easily into the Davidsonian picture, namely dispositional verbs such as German *helfen* (help), *gefährden* (endanger), *erleichtern* (facilitate). These verbs may have an eventive or a stative reading depending on whether the subject is nominal or sentential. Trying to account for their readings within the Davidsonian program turns out to be challenging in several respects and provides new insights into the different nature of events and states. Engelberg advocates the philosophical concept of *supervenience* as a useful device to account for the evaluative rather than causal dependency of the effect state expressed by these verbs.

The proper analysis of state expressions is taken up again by **Anita Mittwoch**. She examines the arguments raised by Katz (2000, 2003) and Maienborn against extending the Davidsonian approach to (all) state expressions and rejects most of them, thereby corroborating the general neo-Davidsonian approach. On this view, states, rather than being different things, are merely somewhat poor examples of event(ualitie)s.

Engelberg's and Mittwoch's considerations concerning the ontological nature of states are supplemented by an article on the syntax of copular state expressions. **Kay-Eduardo González-Vilbazo** and **Eva-Maria Remberger** present a minimalist account of the Spanish copula forms *ser* and *estar*, which figure as lexical exponents of the stage-level/individual-level distinction. *Ser* and *estar* are analyzed as syntactic default strategies (last resort) that are introduced into the derivation at different functional layers: tense (T^0) and predication (Pr^0). Motivation for this comes from current semantic analyses of the *ser/estar* alternation for which the authors strive for a more transparent syntactic correlation.

Finally, causality is taken up again by **Horst Lohnstein**, who proposes a uniform account of the semantics of clause-connectives (*while, if, when, because* etc.) in terms of an invariant quantificational structure whose components are subject to parametrization. Lohnstein shows how different interpretive effects as, e.g., the temporal vs. adversative reading of German *während* (while/whereas) can be derived in this framework.

Section II: ***Event nominals*** presents a syntactic and a lexicalist approach towards an analysis of the argument structure of deverbal nominalizations.

Artemis Alexiadou discusses nominal and verbal gerunds in English within the framework of Distributed Morphology suggesting that the different properties associated with these forms follow from different attachment sites of a nominal *-ing* affix. Whereas nominal gerunds result from attaching *-ing* directly to the verbal root, verbal gerunds result from combining *-ing* with AspectP. On Alexiadou's perspective, argument structure is derived syntactically via an event structure which in turn is introduced by a special type of functional layer in the syntax.

Ingrid Kaufmann, instead, pursues a lexicalist approach according to which argument structure is basically determined at the level of lexical-semantic structure. Kaufmann's analysis is based on a corpus study of German nominalized infinitives showing that nominalized infinitives display two different patterns of argument realization whose distribution is determined by genuine semantic and pragmatic conditions. In order to account for these findings Kaufmann proposes an "ontological" solution according to which the two different patterns of nominalized infinitives differ in the way how the verb's event argument is referentially anchored.

Section III: ***Events in composition*** focuses on the role of event arguments at the syntax/semantics interface. The studies aim at uncovering the combinatorial mechanisms that lead to the formation of complex event descriptions.

Angelika Kratzer develops a novel analysis of German and English adjectival resultatives along the lines of serial verb constructions. In expressions like *to drink my teapot dry* the adjective is taken to combine with an empty CAUSE-affix. The resulting causing event is identified with the event expressed by the verb via the combinatorial operation of *Event Identification*. Kratzer succeeds in showing (a) how several syntactic and semantic properties of resultative constructions can be derived from her analysis and (b) that the direct object in a resultative construction is not a true argument of the verb but always starts out from within the adjectival phrase.

Working within Kratzer's framework, **Daniel Hole** proposes an analysis of possessor and beneficiary datives in German that extends Kratzer's Event Identification into a more general combinatorial operation, called *Variable Identification*. This mechanism serves to augment an event description by an additional thematic argument that will be bound by an already existing argument. Thus, operations like Event Identification and Hole's dative-induced Variable Identification can be seen as a specific implementation of the neo-Davidsonian program of building up complex event descriptions from a maximally coherent conjunction of a set of smaller predications.

Werner Abraham is concerned with the deontic and epistemic readings of modal verbs in the Germanic languages. Putting special emphasis on their Aktionsart-sensitivity, Abraham suggests to account for the polyfunctionality of modal verbs by assuming a control analysis for the deontic reading and a raising analysis for the epistemic reading. This syntactic analysis is correlated with a semantic analysis according to which epistemic modal verbs inherit both the theta properties and the event characteristics of the embedded full verbs, whereas deontic modal verbs project event and thematic arguments of their own.

Finally, **Section IV:** ***Measuring events*** provides a particularly clear picture of the many ways in which event arguments can be involved in measuring expressions.

Patrick Caudal and **David Nicolas** explore the relationship between degree structure and event structure by an analysis of various degree adverbials. Differences in distribution and interpretation are accounted for by assuming different types of degree scales. Degree modifiers like *partially, completely* act as modifiers on quantity scales, whereas *extremely, perfectly* and the like act as modifiers on intensity scales. The proposal rests on the assumption that most verbal predicates, including stative predicates, can receive a degree argument, either for inherent lexical reasons, or by virtue of their structural context. On this basis, Caudal and Nicolas introduce a new – and broader – characterization of (a)telicity in terms of a mapping between degrees and events.

Regine Eckardt draws attention to negative polarity items such as *bat an eyelash*, *lift a finger*, which serve to single out events of a particularly insignificant size. Eckardt develops an event-based variant of the pragmatic approach to NPI licensing proposed by Krifka (1995), showing that her event-based variant has several advantages compared to Krifka's event-free original account. On Eckardt's analysis, the respective NPIs turn out to be a special kind of adverbial modifier denoting functions from event predicates to event predicates. Weak NPIs map event predicates to the minimal events in their extension whereas strong NPIs yield so-called *subminimal events*, i.e., events that are even below the extension of an event predicate. Besides accounting for the different licensing contexts for weak and strong negative polarity items, Eckardt's approach also offers new insights into the ontology of events in terms of mereological structure.

Finally, **Kimiko Nakanishi** examines measure phrases that are separated from their host NP in German split topicalizations as opposed to measure phrases that are adjacent to their host NP. Nakanishi proposes to account for their different semantic properties in terms of different domains of measurement. Whereas the non-split case involves the measurement of individuals in the nominal domain, measure phrases in split topicalizations are analyzed as a means of measuring events in the verbal domain. Several semantic restrictions on split measure phrases such as the incompatibility with single-occurrence events, the incompatibility with individual-level predicates, and the unavailability of collective readings follow from monotonicity constraints applying to the verbal domain.

In their entirety, the articles collected here offer a representative overview of the questions, assumptions and strategies that are presently being pursued in the further development of the Davidsonian program. Our aim is that they will offer further impulses to work in this area.

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